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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/206,329	12/08/1998	GENG ZHANG	970663.ORI	5359

7590 10/22/2002

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EXAMINER

EVANISKO, GEORGE ROBERT

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/206,329

Applicant(s)

ZHANG ET AL.

Examiner

George R Evanisko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-19 and 21-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-19, 21-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

### *Claim Objections*

Claims 1, 3-19, and 21-36 are objected to because of the following informalities: In claims 1 and 19, in paragraph (d) the claim states the sensing is accomplished "between at least one of said atrial electrodes and said ventricular electrodes" but the newly added paragraph (g) has the sensing between any two electrodes, which could include the indifferent electrode. It is suggested to delete the language in paragraph (d) relating to the sensing between atrial and ventricular electrodes. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 12, 14, 15, 29, 30, 32, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 11, 12, 14, 15, 29, 30, 32, and 33, the additional limitation directed to the system further including "an electrically conductive housing that contains the pacing and sensing means" are vague since claims 1 and 19 already have added the indifferent electrode, can, and circuitry in the can.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 4, 6, 11, 15, 19, 21, 22, 24, 29, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Haefner et al (5690683). Haefner meets the limitations of the term "reduced capacitance". In addition, Haefner describes figure 1 as a dual chamber pacer being able to operate in the unipolar or bipolar sensing mode having atrial and ventricular tip and ring electrodes and a can indifferent electrode. Haefner further describes in figure 2 the use of a system in the bipolar mode using the tip and ring electrodes and indifferent can electrode.

Claims 5, 7-10, 12-14, 16-18, 23, 25-28, 30-32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haefner et al.

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Haefner et al disclose the claimed invention except for the different particular combinations of unipolar or bipolar sensing between atrial electrodes (tip and/or ring), ventricular electrodes (tip and/or ring), and case/can electrodes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable electrical therapy device using unipolar and bipolar sensing as taught by Haefner with different combinations of unipolar or bipolar sensing between atrial electrodes (tip and/or ring), ventricular electrodes (tip and/or ring), and case/can electrodes since it was known in the art that unipolar or bipolar sensing between atrial electrodes, ventricular electrodes, and case/can electrodes is used in pacemakers, defibrillators, and ICD's to sense heart activity and that particular configurations are chosen depending on the implantation of the leads and the sensing of the particular heart condition(s).

#### *Response to Arguments*

Applicant's arguments filed 8/2/02 have been fully considered but they are not persuasive. The argument that Haefner fails to "recognize the versatility and scope of combination of sensing electrodes employed with the various embodiments" is not persuasive. Haefner describes figure 1 as a dual chamber pacer being able to operate in the unipolar or bipolar sensing mode having atrial and ventricular tip and ring electrodes and a can indifferent electrode. Haefner further describes in figure 2 the use of a system in the bipolar mode using the tip and ring electrodes and indifferent can electrode. Therefore, Haefner anticipates the claimed limitations, for particular claims, as discussed in the 102 rejection above. In addition, the examiner realizes that Haefner does not disclose all the embodiments used for sensing and provides the 103 rejection in view of common knowledge in the art. One prior art reference (of

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many) showing that it is obvious to one having ordinary skill in the art to have the different claimed embodiments used for sensing is Sholder, 5222493 (previously cited). The motivation for the combination for the 103 rejection being that it is known to use the different combinations in pacemakers, defibrillators, and ICD's to sense heart activity and that particular configurations are chosen depending on the implantation of the leads and the sensing of the particular heart condition(s).

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R Evanisko whose telephone number is 703 308-2612. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703 308-5181. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703 306-4520 for regular communications and 703 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1148.

George R Evanisko  
Primary Examiner  
Art Unit 3762

10/11/02

GRE  
October 11, 2002